

<110> Paul DeAngelis
 <120> CHONDROITIN SYNTHASE GENE AND METHODS OF MAKING AND USING SAME
 <130> 5820.601
 <140> Not Yet Assigned
 <141> Herewith
 <160> 7
 <170> WordPerfect 8.0 (saved in ASCII format)
 <210> 1
 <211> 2941 base pairs
 <212> DNA
 <213> Pasteurella Multocida
 <220>
 <400> pmCS DNS Sequence

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121    aaattatttg agaagtctgc tgaaacctac gggcgaaaaa tcgttgaatt ccaaattatc
181    aaatgtaaaag aaaaactctc gaccaattct tatgtaagtg aagataaaaa aaacagtgtt
241    tgcgatagct cattagatat cgcaacacag ctcttacttt ccaacgtaaa aaaattaact
301    ctatccgaat cagaaaaaaa cagtttaaaa aataaatgga aatctatcac tgggaaaaaa
361    tcggagaacg cagaaatcag aaaggtggaa ctagtaccga aagattttcc taaagatctt
421    gttcttgctc cattgccaga tcatgttaat gattttacat ggtacaaaaa tcgaaaaaaa
481    agcttaggta taaagcctgt aaataagaat atcgggtctt ctattattat tcctacattt
541    aatcgtagcc gtattttaga tataacgtta gcctggttgg tcaatcagaa aacaaactac
601    ccatttgaag tcgttgttgc agatgatggg agtaaggaaa acttacttac cattgtgcaa
661    aaatacgaac aaaaacttga cataaagtat gtaagacaaa aagattatgg atatcaattg
721    tgtgcagtca gaaacttagg ttacgtaca gcaaagtatg attttgtctc gattctagac
781    tgcgatattg caccacaaca attatggggt cattcttata ttacagaact attagaagac
841    aatgatattg ttttaattgg acctagaaaa tatgtggata ctcataatat taccgcagaa
901    caattcctta acgatccata tttaatagaa tcactacctg aaaccgctac aaataacaat
961    ctttcgatta catcaaaagg aaatatatcg ttggattgga gattagaaca tttcaaaaaa
1021   accgataatc tacgtctatg tgattctccg tttcgttatt ttgttgcggg taatgttgca
1081   ttttctaaaag aatggctaaa taaagtaggt tggttcgatg aagaatttaa tcattggggg
1141   ggcgaagatg tagaatttgg ttacagatta ttgccaag gctgtttttt cagagttaatt
1201   gacggcgga gggccatcca tcaagaacca cctggtaaa gaaatgaaac agaacgcgaa
1261   gctggtaaaa gtattacgct taaaattgtg aaagaaaagg taccttacct ctatagaaa
1321   cttttaccaa tagaagattc acatattcat agaatacctt tagtttctat ttaatcccc
1381   gcttataact gtgcaaatta tattcaaaga tgtgtagata gtgctcttaa tcaaaactgtt
1441   gtcgatctcg aggtttgtat ttgtaacgat ggttcaacag ataatacctt agaagtgatc
1501   aataagcttt atggtaataa tcttagggta cgcacatcat ctaaaccaaa tggcggaata
1561   gcctcagcat caaatgcagc cgtttctttt gctaaagggt attacattgg gcagttagat
1621   tcagatgatt atcttgagcc tgatgcaggt gaactgtgtt taaaagaatt tttaaaagat
1681   aaaacgctag cttgtgttta taccactaat agaaacgtca atccggatgg tagcttaatc
1741   gctaattggt acaattggcc agaattttca cgagaaaaac tcacaacggc tatgattgct
1801   caccatttta gaatgtttac gattagagct tggcatttaa cggatggatt taacgaaaat
1861   attgaaaacg ccgtggatta tgacatgttc cttaaactca gtgaagtggg aaaatttaaa
1921   catcttaata aaatctgcta taaccgcgta ttacatgggt ataacacatc cattaagaaa
1981   ctgggcattc aaaagaaaaa ccattttgtt gtagtcaatc agtcattaaa tagacaaggc
2041   atcaattatt ataattatga caaatttgat gatttagatg aaagtagaaa gtatatcttc
2101   aataaaaccg ctgaatatca agaagaaatg gatatgttaa aagatcttaa actcattcaa
2161   aataaagatg ccaaaatcgc agtcagtatt ttctatccca atacattaaa cggcttagtg
2221   aaaaaactaa acaattatg tgaatataat aaaaatatat tcgttattat tctacatggt
2281   gataagaatc atcttacacc agacatcaaa aaagaaatat tggctttcta tcataagcac
2341   caagtgaata ttttactaaa taatgacatc tcatattaca cgagtaatag actaataaaa
2401   actgaggcac atttaagtaa tattaataaa ttaagtcagt taaatctaaa ttgtgaatac
2461   atcatttttg ataatcatga cagcctattc gttaaaaatg acagctatgc ttatatgaaa
2521   aaatatgatg tcggcatgaa tttctcagca ttaacacatg attggatcga gaaaatcaat
2581   gcgcatccac catttaaaaa gctgattaaa acctatttta atgacaatga ctaagaagat
  
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 2761 aacactgagg atatttggtt ccaatttgca cttttaatct tagaaaagaa aaccggccat
 2821 gtatttaata aaacatcgac cctgacttat atgccttggg aacgaaaatt acaatggaca
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<110> Paul DeAngelis
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 <130> 5820.601
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 <160> 7
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 <210> 2
 <211> 961 base pairs
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 <213> Pasteurella Multocida
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121 vlaplpdhvn dftwyknrkk slgikpvnkn iglsiiptf nrsrilditl aclvnqktny
181 pfevvvaddg skenlltivq kyeqkldiky vrqkdygyql cavnrlglrt akydfvsild
241 cdmapqqlwv hsyltelled ndivligprk yvdthnitae qflndpylie slpetatnnn
301 psitskgnis ldwrlehfkk tdnrlrcdsp fryfvagnva fskewlnkvg wfdeefnhwg
361 gedvefgyrl fakgcffrvi dggmaihqep pgkenetere agksitlkiv kekvpviyrk
421 llpiedshih riplvsiyip ayncanyiqr cvdsalnqtv vdlevbicnd gstdntlevi
481 nklygnnprv rimskpnggi asasnaavsf akgyyigqld sddylepdav elclkeflkd
541 ktlacvyttt rnvnpdgsli angynwpefs reklttamia hhfrmftira whltldgfnen
601 ienavdydmf lklsevgkfk hlnkicynrv lhgdntsikk lgiqkknhfv vvnqslnrqg
661 inyynydkfd dllesrkyif nktaeyqgem dmlkdlkliq nkdakiavsi fypntlnglv
721 kklnniieyn knifviilhv dknhltpdik keilafyhkh qvnillnndi syysnrlik
781 teahlsnink lsqnlncney iifdnhdslf vkndsyaymk kydvgnmfsa lthdwiekin
841 ahppfkklk tyfndndlrs mnvkgasqgm fmkyalphel ltiikevits cqsidsvpey
901 ntediwfqfa llilekktgh vfinktstlty mpwerklqwt neqigsakkg enipvnkfii
961 nsitl
  
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<110> Paul DeAngelis
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 <130> 5820.601
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121    aaattattttg agaagtctgc tgaaacctac gggcgaaaaa tcgttgaatt ccaaattatc
181    aaatgtaaag aaaaactctc gaccaattct tatgtaagtg aagataaaaa aaacagtgtt
241    tgcgatagct cattagatat cgcaacacag ctcttacttt ccaacgtaaa aaaattaact
301    ctatccgaat cagaaaaaaaa cagtttaaaa aataaatgga aatctatcac tgggaaaaaa
361    tcggagaacg cagaaatcag aaagggtgga ctagtacca aagattttcc taaagatctt
421    gttcttgctc cattgccaga cttgtttaat gattttacat ggtacaaaaa tcgaaaaaaa
481    agcttaggta taaagcctgt aaataagaat atcggctctt ctattattat tcctacattt
541    aatcgtagcc gtatttttaga tataacgtta gcctgttttg tcaatcagaa aacaaactac
601    ccatttgaag tcgttgttgc agatgatggt agtaaggaaa acttacttac cattgtgcaa
661    aaatacgaac aaaaacttga cataaagtat gtaagacaaa aagattatgg atatcaattg
721    tgtgcagtca gaaacttagg ttacgtaca gcaaagtatg attttgtctc gattctagac
781    tgcgatatgg caccacaaca attatgggtt cattcttctc ttacagaact attagaagac
841    aatgatattg ttttaattgg acctagaaaa tatgtggata ctcataatat taccgcagaa
901    caattcctta acgatccata tttaatagaa tcactacctg aaaccgctac aaataacaat
961    ccttcgatta catcaaaaagg aaatatatcg ttggattgga gattagaaca tttcaaaaaa
1021   accgataatc tacgtctatg tgattctccg tttcgttatt ttagttgcgg taatgttgca
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1201   gacggcgaa tggcatacca tcaagaacca cctggtaaag aaaatgaaac agaccgcgaa
1261   gctggtaaaa gtattacgct taaaattgtg aaagaaaagg taccttacct ctatagaaag
1321   cttttaccaa tagaagattc acatattcat agaatacctt tagtttctat ttatatcccc
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1921   catcttaata aaatctgcta taaccgcgta ttacatgggtg ataacacatc cattaagaaa
1981   ctcggcattc aaaagaaaaa ccattttggt gtagtcaatc agtcattaaa tagacaaggc
2041   atcaattatt ataattatga caaatttgat gatttagatg aaagtagaaa gtatatcttc
2101   aataaaaccg ctgaatatca agaagaaatg gatattttta aagatcttaa actcattcaa
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2221   aaaaaactaa acaatattat tgaatataat aaaaatatat tcgttattat tctacatggt
2281   gataagaatc atcttacacc agacatcaaa aaagaaatat tggctttcta tcataagcac
2341   caagtgaata ttttactaaa taatgacatc tcatattaca cgagtaatag actaataaaa
2401   actgaggcac atttaagtaa tattaataaa ttaagtcagt taaatctaaa ttgtgaatac
2461   atcatttttg ataactatga cagcctattc gttaaaaatg acagctatgc ttatatgaaa
2521   aaatatgatg tcggcatgaa tttctcagca ttaacacatg attggatcga gaaaatcaat
  
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2581 gcgcatccac catttaaaaa gctgattaaa acctatTTTTa atgacaatga cTTaagaagt
 2641 atgaatgtga aaggggcatc acaaggTatg tttatgaagt atgCGctacc gcatgagcTT
 2701 ctgacgatta ttaaagaagt catcacatcc TGccaatcaa ttgatagtgt gccagaatat
 2761 aacactgagg atatttggtt ccaatttgca cttttaatct tagaaaagaa aaccggccat
 2821 gtattttaata aaacatcgac cctgacttat atgccttggg aacgaaaatt acaatggaca
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<110> Paul DeAngelis
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121 vlaplpdhvn dftwyknrkk slgikpvnkn iglsiiptf nrsrilditl aclvnqktny
181 pfevvvaddg skenlltivq kyeqkldiky vrqkdygyql cavnrlglrt akydfvsild
241 cdmappqlwv hsyltelled ndivligprk yvdthnitae qflndpylie slpetatnnn
301 psitskgnis ldwrlehfkf tdnrlrcdsp fryfscgnva fskewlnkvg wfdeefnhwg
361 gedvefgyrl fakgcffrvi dggmayhqep pgkenetdre agksitlkiv kekvpaiyrk
421 llpiedshih riplvsiyip ayncanyiqr cvdsalnqtv vdlevicnd gstdntlevi
481 nklygnnprv rimskpnggi asasnaavsf akgyyigqld sddylepdav elclkeflkd
541 ktlacvyttt rnvnpdgsli angynwpefs reklttamia hhfrmftira whltdgfnen
601 ienavdydmf lklsevgkfk hlnkicynrv lhgdnstikk lgiqkknhfv vvnqslnrqg
661 inyynydkfd dldestryif nktaeygeem dilkdldklig nkdakiavsi fypntlnglv
721 kklnniieyn knifviilhv dknhltpdik keilafyhkh qvnillnndi syytsnrlik
781 teahlsnink lsqnlncney iifdnhdslf vkndsyaymk kydvgnmfsa lthdwiekin
841 ahppfkklk tyfndndlrs mnvkgasqgm fmkyalphen ltiikevits cqsidsvpey
901 ntediwfqfa llilekktgh vfntkstlty mpwerklqwt neqigsakkg enipvnkfii
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<110> Paul DeAngelis
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<130> 5820.601
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<110> Paul DeAngelis
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<110> Paul DeAngelis
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<400> Antibody

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